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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/066,154	01/31/2002	Lawrence A. Denenberg	23484-011	3555

7590 10/17/2007  
MINTZ, LEVIN, COHN, FERRIS,  
GLOVSKY AND POPEO, P.C.  
One Financial Center  
Boston, MA 02111

EXAMINER
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ARMSTRONG, ANGELA A

ART UNIT	PAPER NUMBER
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2626

MAIL DATE	DELIVERY MODE
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10/17/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/066,154

Applicant(s)

DENENBERG ET AL.

Examiner

Angela A. Armstrong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3,4,6-11,13,16,17,35,37-44,64,65,69,70,75,77-79,82 and 84-89 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,4,6-11,13,16,17,35,37-44,64,65,69,70,75,77-79,82 and 84-89 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on August 3, 2007, has been entered.

### ***Claim Rejections - 35 USC § 101***

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 35, 37-44, 75, 77-79, 82, and 84-89 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

4. Claims 35, 37-44, 75, 77-79, 82, and 84-89 are directed to a computer program.

Computer programs claimed as the description or expressions of the programs are not physical "things." They are neither computer components nor statutory processes, as they are not "acts" being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer, which permit the computer program's functionality to be realized. Since a computer program is merely a set of instructions capable of being executed by a computer, the computer program itself is not a process (see USPTO Interim Guidelines for Patent Subject Matter Eligibility) and the Office treats a claim for a computer program, without the computer-readable medium needed

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to realize the computer program's functionality, as nonstatutory functional descriptive material.

When a computer program is claimed in a process where the computer is executing the computer program's instructions, the Office treats the claim as a process claim. When a computer program is recited in conjunction with a physical structure, such as a computer memory, the Office treats the claim as a product claim.

***Claim Rejections - 35 USC § 103***

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claims 1,3-4,6-11, 13, 16-17,35,37-44,64-65,69-70,75,77-79,82, and 84-89 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weber (US Patent No. 6,434,524) in view of Kendall et al (US Patent No. 5,995,918).

7. Weber discloses a system and method for interacting with objects, via a computer using utterances, speech processing and natural language processing.

8. Regarding claim 1, Weber discloses an apparatus, system and method implementing a general purpose computer (102) including associated memory (108) storage (col. 5, lines 27-29); a voice application platform ("voice interaction system) including a speech recognizer (200) for recognizing speech as a function of said unit of input information (col. 4, lines 13-17); and a command processor (202) adapted for analyzing a first unit of input information. Additionally, Weber teaches the system allows for adding to the context-specific grammars (col. 8, lines 38-45; col. 15, line 6 to col. 16, line 65; Figure 7A) and provides for a first application (accessing a help file or browsing the world wide web) configured to output a grammar (context-specific

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grammar files and context-specific dictation models) and to receive a user selection (speech interactions available to the user) associated with the grammar; a voice application platform (col. 4, lines 13-17) adapted to receive a speech input and to receive the grammar from the first application (DDF file transferred), and to output the user selection (speech interactions) to the first application, the voice application platform including a processor (col. 3, lines 39-50) configured to analyze the grammar and to modify the grammar (col. 12, line 60 continuing to col. 13, line 24), and a speech recognizer (200) coupled to the processor and configured to interpret the speech input (speech interactions available to the user) as a function of the data input object, and to produce the user selection.

Weber does not disclose the processor is configured to analyze the grammar prior to receiving speech input, to identify at least one characteristic of the grammar independent of prior speech input. Kendall discloses a system and method for creating a language grammar. When the grammar is defined, the computer software system automatically traverses the table to enumerate all possible valid utterances in the grammar. This traversal generates a listing (corpus) of valid utterances and their respective tokens. This listing can then be used to interpret spoken utterances for a speech-enabled system. Kendall further discloses (col. 5, line 51 continuing to col. 6, line 35) the ASR grammar contains information regarding the words and phrases that the speech recognizer will be required to recognize, written in a form that is compatible with the recognizer. The file is also optimized to take advantage of peculiarities relating to the chosen speech recognizer. In an example, Kendall describes the process of modifying the grammar and/or rules of the grammar. Kendall's example specifically indicates the advantages of

modifying the grammars to achieve optimization of the grammar for implementation in a specific speech recognizer.

Therefore, it would have been obvious to one of ordinary skill at the time of the invention to modify the system of Weber to implement a system of analyzing and modifying the grammar prior to receiving speech input, as suggested by Kendall, for the purpose of optimizing the grammar so as to improve the recognizer's accuracy and performance, as also suggested by Kendall.

Regarding claims 3 and 64-65, the combination of Weber and Kendall discloses characteristic is indicative that said first unit of input information includes a set of terms and said first unit of input information is modified to produce said modified first unit of input information that includes at least one additional term not included in said first unit of input information (col. 8, lines 38-41; col. 9, lines 8-17; col. 9, lines 42-63; col. 12, lines 51-67).

Regarding claim 4, the combination of Weber and Kendall discloses at least one additional term is a synonym of at least one term in said set of terms (col. 10, lines 56-61).

Regarding claim 6, the combination of Weber and Kendall discloses at least one additional term is associated with a first function that can be performed when said voice application platform recognizes said at least one addition term (col. 8, lines 38-41; col. 9, lines 8-17; col. 9, lines 42-63; col. 12, lines 51-67).

Regarding claim 7, the combination of Weber and Kendall discloses said set of terms is representative of a set of responses expected to be received by said application and said at least one additional term is a synonym of at least one term in said set of terms (col. 10, lines 56-61).

Regarding claim 8, the combination of Weber and Kendall discloses said set of terms is representative of a set of responses expected to be received by said application and said at least one additional term is associated with a first function that can be performed when said voice application platform recognizes said at least one addition term, whereby said first function is adapted to include in a response to be sent to said application, at least one term in said set of terms (col. 8, lines 38-41; col. 9, lines 8-17; col. 9, lines 42-63; col. 12, lines 51-67).

Regarding claim 9, the combination of Weber and Kendall discloses first function is further adapted for substituting said at least one term in said set of terms for said at least one additional term in a response to be sent to said application (col. 8, lines 38-41; col. 9, lines 8-17; col. 9, lines 42-63; col. 12, lines 51-67).

Regarding claim 10, the combination of Weber and Kendall discloses set of terms is representative of a set of responses expected to be received by said application and said at least one additional term is associated with a first function that can be performed when said voice application platform recognizes said at least one addition term, whereby said first function is adapted to include, in a response to be sent to said application, a term selected from a memory as a function of said at least one additional term recognized by said voice application platform (col. 8, lines 38-41; col. 9, lines 8-17; col. 9, lines 42-63; col. 12, lines 51-67).

Regarding claim 11, the combination of Weber and Kendall discloses term selected from a memory is associated with a user of said voice application platform (col. 10, lines 4-16).

Regarding claim 13, the combination of Weber and Kendall discloses said first unit of input information includes a first type of input information associated with a first speech recognizer based upon a first speech recognition paradigm ("context-specific grammar") and said

first unit of input information is modified to produce a second unit of input information which includes a second type of input information associated with a second speech recognizer based upon a second speech recognition paradigm (“general grammar”) which is different from said first speech recognition paradigm (col. 3, lines 8-11).

Regarding claim 16, the combination of Weber and Kendall discloses a prompt synthesizer (col. 12, lines 47-50) adapted for receiving information representative of a prompt, and wherein said first unit of input information includes information representative of a prompt and said command processor receives said information representative of a prompt and said command processor modifies said first unit of input information as a function of said information representative of a prompt (col. 12, lines 52-59).

Regarding claims 17, 69 and 70, the combination of Weber and Kendall discloses (col. 12, lines 45-59) a prompt synthesizer adapted for receiving information representative of a prompt, and wherein information representative of a first prompt is received from said application and said voice application platform is adapted for presenting said first prompt to a user and a second prompt to said user.

9. Regarding claims 35, 37-44, 75, 77-79, 82, and 84-89: claims 35, 37-44, 75, 77-79, 82, and 84-89 are similar in scope and content to claims 1, 3-4, 6-11, 13, 16-17, 64-65, and 69-70 and are therefore rejected under similar rationale.

### ***Response to Arguments***

10. Applicant's arguments filed August 3, 2007, have been fully considered but they are not persuasive. Applicant argues neither Weber nor Kendall teach or disclose the grammar is in the



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form to be used by the speech recognizer. The Examiner cannot concur. Kendall specifically discloses (col. 5, line 51 continuing to col. 6, line 35) the ASR grammar contains information regarding the words and phrases that the speech recognizer will be required to recognize, written in a form that is compatible with the recognizer. Applicant argues neither Weber nor Kendall teach or disclose analyzing the first grammar to identify characteristics prior to receiving a first set of responses or selecting a response to be sent to the application as a function of the characteristic. The Examiner cannot concur. The combination of Weber and Kendall disclose identifying grammar characteristics prior to a user input and selecting responses based on the characteristics at col. 8, lines 38-41; col. 9, lines 8-17; col. 9, lines 42-63; col. 12, lines 51-67.

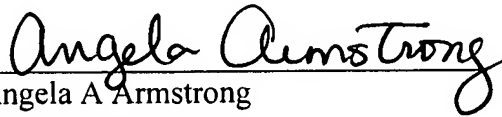
### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angela A. Armstrong whose telephone number is 571-272-7598. The examiner can normally be reached on Monday-Thursday 11:30-8:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick N. Edouard can be reached on 571-272-7603. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Angela A Armstrong  
Primary Examiner  
Art Unit 2626

AAA  
October 14, 2007